

Enclosure
EPA comments on Draft BHHRA
Required Modifications to Text, Tables and Figures
June 22, 2012

Globally remove all references to Draft in the BHHRA (e.g., headers) and to document being under review by EPA and partners (e.g., footers and cover pages).

Delete the text from Attachment F2, as it was incorporated into Section 2 of the main text. Attachment F2 is now just the tables.

Combine Tables 2-1 and 2-2 into a single Table 2-1 titled "BHHRA Data Summarized by Matrix," and Tables 2-3 and 2-4 into a single Table 2-2 titled "Summary of BHHRA Sediment Data."

Revise the names of Section 3 tables, from "Mean and 95% UCL and Maximum Exposures" to "Central Tendency and Reasonable Maximum Exposures." Alternately, simply naming the tables "Exposure Point Concentration Summary" is acceptable.

Delete all tables in Section 5 for fish consumption based on "Mean concentration" as shown in the revised List of Tables. The remaining fish consumption tables are renamed as follows:

- Change "17.5 g/day consumption rate" to "Recreational Fishers, Central Tendency Exposure"
- Change "73 g/day consumption rate" to "Recreational Fishers, Reasonable Maximum Exposure"
- Change "142 g/day consumption rate" to "Subsistence Fishers, Reasonable Maximum Exposure"

The revised convention of referring to the consumption rates of 17.5 g/day and 73 g/day as CT and RME for recreational fishers, and 142 g/day as RME for subsistence fishers should be also be applied to the figures and maps. All references to fish consumption scenarios using an exposure concentration based on the simple mean should be deleted. This convention should also be applied to the tables in Attachment F3. Note that some of the river mile designations in the tables in Attachment F3 are incorrectly formatted as subscripts.

Replace tables 5-199 through 5-203 with the cumulative risk tables provided in the enclosed Cumulative Risk Estimates Excel file. These tables need to be numbered and incorporated into the main text, as identified.

Add PDBEs to the former Table 5-204 as a chemical potentially posing unacceptable risk.

Global changes: Delete chemicals that are not used in the sums. Noncancer hazard should be presented in decimal format rather than scientific notation. In all footnotes, delete "RME = 95% UCL/Maximum Exposure." Change "Oral contact" to "Ingestion."

When describing the numerical values of tissue consumption rates, change “ingestion rate” to “consumption rate” in tables, figures, and maps.

In tables presenting EPCs and risk/hazard estimates associated with fish consumption, the term “F” needs to be defined as “fillet” in the footnotes.

Table 6-2: Please use a consistent number format.

Maps:

Dredging and capping areas are not relevant to the BHHRA, and should be deleted from all figures. The legends in maps presenting cancer risk and/or noncancer hazard should identify risk and hazard as greater than $1E-6$ or 1, not “exceedances.” Change “scenarios” to “evaluations.” The Hazard Index should be presented in decimal format to clearly distinguish it from cancer risks. Note that the hazard values presented represent a hazard index, not a hazard quotient.

Delete the phrase “95% UCL/maximum exposure point concentrations” from the legend in all of the maps presenting fish/shellfish consumption risks and hazards.

Map 2-7: The sampling locations should be identified.

Map 2-8: Delete “untreated” from the title.

Delete Maps 5-2-1 and 5-2-2. We are unaware of any possible mechanism by which receptors can be exposed only to that portion of arsenic concentrations greater than background. Thus, the values presented on this figure are not associated with any plausible exposure scenario.